

ICE BREAKER

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PRICES ON APPLICATION

EDITORIAL

At last the announcement has been made! Hobart is the chosen base for the airlink from Australia to Antarctica. While it was disappointing that a NSW company, Sky Traders, was chosen as the preferred operator of this air service, rather than a Tasmanian company, the economic benefits to Tasmania will be very welcome, particularly with many of the Tasmanian Polar Network members already involved with preparations for the airlink.

As Bill Lawson, Chairman of the TPN suggests, businesses with Antarctic goods and services should contact SkyTraders as soon as possible to familiarise them with what is available in Tasmania. Let's not have another situation similar to Dreamworld's initial ownership of Antarctic Adventure, when only limited assistance was sought and accepted from the local Antarctic community to set up the Centre. Fortunately, in the case of the air link operator, Bill Bleathman, Director of the Office of Antarctic Affairs and Secretary of the TPN, has already visited Norman McKay, Manager of SkyTraders, and he has accepted an invitation to meet TPN members soon.

This edition of ICE BREAKER welcomes two new contributors. Peg Putt, the only Tasmanian Greens Member of Parliament, has agreed to provide a regular article and ICE BREAKER is pleased that the magazine now has tri-partite support. Also joining us is Rod Cameron-Tucker, the new General Manager of Antarctic Adventure, whose involvement in Antarctic matters has already made a difference to the Centre. Thanks must also go to all other regular contributors who submit items despite working full-time at their own businesses. A much-appreciated effort!

Anthea Wallhead

FRONT COVER: Aircraft chosen for the Hobart-Antarctica flights. Above, a Dassault Falcon jet and below, a CASA 212. [Artwork by Robert Wallhead]



FROM THE PREMIER'S DESK

What great news for the State's Antarctic Community

As both Premier and Minister for Antarctic Affairs, I welcome the announcement that Hobart is the preferred location for the Australian Antarctic Division's air operations. This project will bring capital, infrastructure and jobs to Tasmania.

I have always maintained that Hobart is the logical choice for Australia's Antarctic air operations and this decision reinforces Tasmania's important role in Antarctic issues. Hobart's selection is a major achievement for the State.

This is significant news for Tasmania's Antarctic community. Our unique relationship with Antarctica is about to enter a new and exciting phase.

The success of this project has the potential to encourage other Antarctic nations to locate their operations in our State, reinforcing Tasmania's reputation as a key international Antarctic gateway.

The Australian Antarctic Division has demonstrated confidence in the Tasmanian Antarctic community's capacity by choosing Hobart as the air link base. I commend the Antarctic Division for its innovation and determination to establish this air link.

The strong arguments mounted by other potential Australian departure points were countered by a determined and bi-partisan approach by Tasmania's elected representatives.

The Office of Antarctic Affairs has liaised with all of the shortlisted contractors and provided regular information to interested politicians in support of the State's case for the location of the air link. The office will continue to play a major role in infrastructure and support requirements with SkyTraders.

I also acknowledge the ongoing support and assistance of the Tasmanian Polar Network in arguing the case for Hobart.

The preferred company to operate the link, SkyTraders, is one of Australia's leading air charter brokers and cargo airline representatives.

SkyTraders, based in Sydney, will establish an operational base in Hobart, including dedicated air crews and support staff.

SkyTraders will add significantly to the State's Antarctic community and provide an important new service that will enhance Hobart's reputation as a world-class centre for Antarctic logistics and provisioning.

The decision issues a challenge to the Tasmanian Antarctic community to ensure that the project's logistical and infrastructure requirements are at the leading edge of Antarctic aviation and support.

We can collectively be very pleased with what we have achieved to-date. However, it is incumbent on all of us to do whatever needs to be done to make this project a reality.

Jim Bacon MHA

Premier

Minister for State Development

A MESSAGE FOR ICE BREAKER READERS



In the wider community the preservation of Mawson's Hut has been a topic of conversation. So I take this opportunity to examine the subject. May I say from the outset that this is not an authoritative article but I hope it is of some interest to Ice Breaker readers.

Mawson's Hut historic site is of national and international heritage significance. The hut is unique in the context of Australian history because it is the only surviving site that represents the work of Australian Antarctic expeditions of the time. The site provides the setting for the buildings, structures and relics of the main base of the Australasian Antarctic expedition of 1911 – 1914.

Arguably there is nothing more important about the management of Mawson's Hut Historic Site than the obligation to conserve it. The question is how should this conservation occur. Discussion about the repatriation of the main hut to Australia has not been supportable on either heritage or pragmatic grounds. Therefore, the issues dealing with the conservation of Mawson's Hut and other structures and artefacts must be considered in that context. All conservation work of the Mawson's Hut Historic Site of course would have to comply with the requirements of the Antarctic Treaty and the Madrid Protocol.

In 1996 an inspection of Mawson's Hut determined that work was required for the stabilisation of Mawson's Hut. The report noted that the roof of the main hut was in good condition, the hut had significant ice accumulation inside it and recommended that a clear vision for how Mawson's Hut should be conserved, presented and interpreted in the future be determined. The revelation of significant fabric and spaces by the removal of snow and ice in the internal rooms of the main hut is a principle aim of the conservation policy. Some snow and ice in the internal rooms may remain for essential structural or conservation reasons.

The draft conservation management plan produced by Godden Mackay Logan argues that the principle of ice removal from the main hut ought be progressed but only after a consensus is reached that the structural and environmental risks are acceptable. With limited funding available for preservation work, it is important to know which deterioration processes are most rapid and most damaging so that treatment can be prioritised. Relatively little scientific information appears to exist concerning deterioration of materials in Antarctic conditions. What is known is that all methods of conservation depend on some form of environmental control after treatment if they are to achieve long-term success.

An ethical consideration in the removal of the ice requires that there be sufficient evidence that such removal will not harm, or lead to harm of either the building or artefacts. Damage is believed to have occurred in the Ross Dependency huts during ice removal at that site. Some artefacts found well preserved when excavated from the ice have since deteriorated rapidly. It is considered that the removal of ice from inside Mawson's Hut will help conserve it. However concern has been expressed that this ice is consolidating and anchoring the structure. Removal may affect the anchoring of the hut's posts and foundations (the posts were frozen into rock when it was constructed).

Corrosion and erosion remain other causes of major concern for the long-term future of Mawson's Hut. The relative humidity inside Mawson's Hut during summer, according to Janet Hughes (University of Canberra), can exceed 95% and in summer the melt water around the lower walls and floor may be increasing the rate of corrosion. Erosion of outside timber by katabatic wind-borne particles has been particularly severe on the corners and roof edges of the building.

The draft conservation plan favours the removal of internal ice from Mawson's hut as well as a range of other conservation works. While there may be debate about the wisest way to proceed, what appears beyond doubt, is the need for serious conservation action. Without it the elements inevitably will destroy not just a hut, but also a site of national and international significance.

Martin McManus M.H.A.
Shadow Minister for Antarctic Affairs



PEG PUTT'S MESSAGE

I have a strong personal and political interest in Antarctica and the Sub-Antarctic Islands.

From childhood my life has been mixed up with the frozen continent, my father Colin Putt having been part of the 64-65 private expedition to Heard Island. He was in the group which made the first ascent of Big Ben on that occasion and he also surveyed the island, being made a Fellow of the Royal Geographical Society as a result.

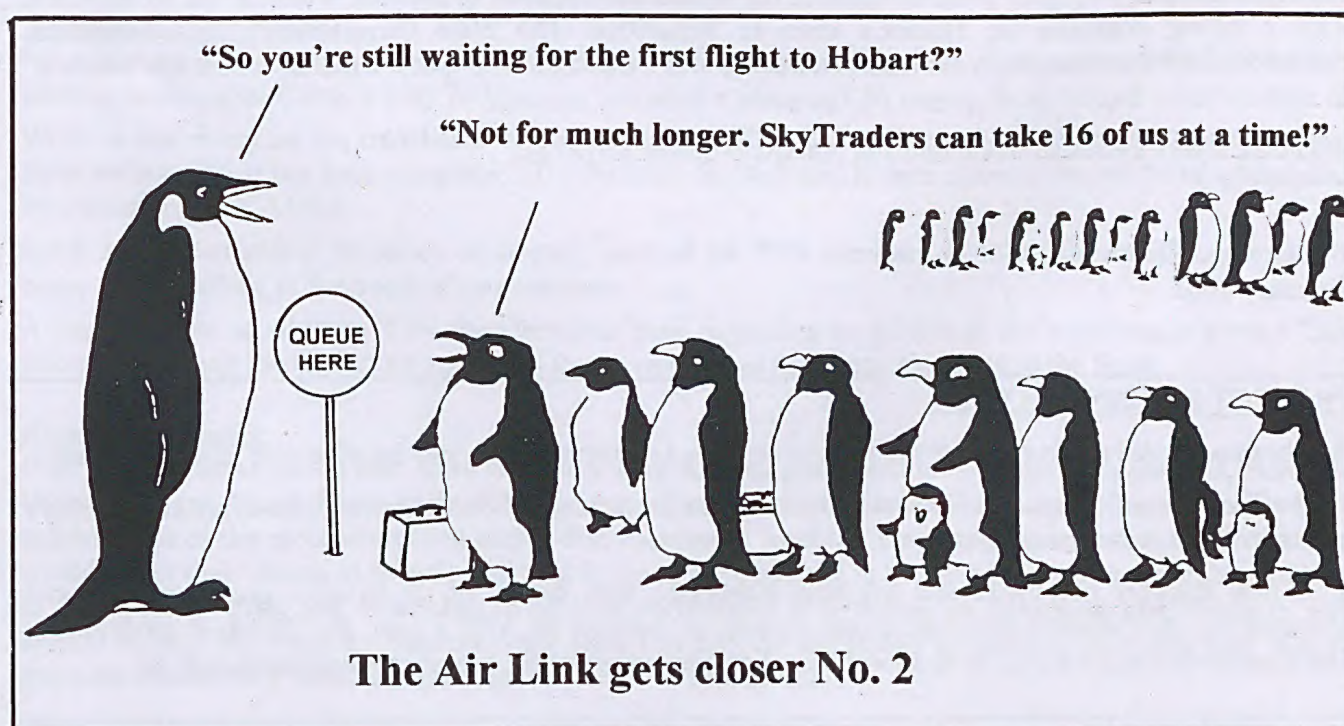
Later on in retirement(!) he sailed a private expedition to Commonwealth Bay to initially investigate the state of Mawson's Hut, and then another to climb Mt Minto.

I have also had an involvement with the 1980's campaign against establishment of an Antarctic Minerals Regime, which was to allow mining, and in favour of a World Park. I am still passionately concerned to protect our last great wilderness from degradation, and to clean up the messes we've made.

At the same time I believe there are big opportunities for Tasmania to make a valuable contribution to the health of the Antarctic whilst creating jobs and wealth with our efforts. In particular we should be promoting and expanding our strength as a supply and re-supply port for ship-based Antarctic activity. We should also be selling our expertise in the environmental management of tourism.

I'm not a fan of the air link however, as it brings with it the potential to greatly increase people pressure on this fragile environment, particularly once the push for tourism access via this method gets going. The major focus for important environmental research is the marine environment of the Southern Ocean, but the air link has the potential to skew research priorities away from this area. The direct on-ground impacts of fuel storage and shelter construction are also concerns.

Peg Putt MHA
Tasmanian Greens





TPN CHAIRMAN'S MESSAGE

I'm delighted to be able to now applaud the Federal Government's recent decision to commit to Hobart as the point of embarkation and disembarkation for the Antarctic Airlink. Many Tasmanians have worked hard and in a co-ordinated manner to achieve this outcome against a very real and well-organised effort from Albany in WA. I want to acknowledge and thank everyone who 'put in' to this outcome, particularly our Tasmanian Senators, all of whom were willing to put the state's best interests ahead of party politics and work together – another great example of how we are able to keep Tasmania's Antarctic interests above politics. The support of the Bacon Government and the Office of Antarctic Affairs in achieving this result is also worthy of acknowledgement by us all.

We now keenly await the detailed development of the Airlink by the AAD and it's nominated Service Provider, Skytraders. I encourage all TPN members to make contact with Skytraders and make sure their capabilities in both product and service terms are known to them for possible incorporation into the many diverse facets of the Airlink. It is for us to help ourselves in this developing opportunity and not for us to await invitation to participate. Now is the time!!

I recently attended the AAD's launch of 'Classroom Antarctica' by Dr. Sharman Stone and want to congratulate everyone involved in developing this fantastic teaching and information resource – it has to be seen to be believed. All you ever wanted to know about Antarctica and our role in its exploration, protection and science. I urge everyone to visit it on www.classroomantarctica.aad@aad.gov.au to see for you. Don't be 'put off' by the fact that it is targeted as an educational aid for kids as it is a terrific information source with many linkages to other sites and details built into it. Again, congratulations to all involved in getting this to happen. It is noteworthy that it aligns very well with one of the outcomes of the Governor's Forum in respect to educational opportunities.

Another outcome of the Governor's Forum is the possible development of specifically Antarctic focused educational courses at both undergraduate and Year 11/12 College levels. I am pleased to report that the TPN and OAA have held joint initial discussions in respect to both possibilities and that further discussions are planned to see if it can be done.

Finally, I note the very good progress towards the further development of the Mid Winter Event by the OAA with a strong emphasis on Hobart's links to Antarctica. The State Government's recent financial commitment to this emerging event bears testimony to it's willingness to 'put it's money where it's mouth is' in relation to the further development of Tasmania's Antarctic interests.

All in all, a very exciting three months of Antarctic-related activities.

Bill Lawson. Chairman.
February 2002.

PROJECT FUNDING ACCESS

Any businesses developing special products or services for Antarctic use may be interested in the following:

1. The Tasmanian Government Office in Canberra lists more than 400 funding programs, available to groups and individuals, on www.tas.gov.au
2. A new monthly newsletter that provides businesses with details of all business grants, professional scholarships, plus industry and professional awards, is available for \$195 a year. BusiGrants is produced by Our Community and is e-mailed to subscribers. For more information, see www.busi grants.com.au



OFFICE OF ANTARCTIC AFFAIRS

Antarctic Marketing Strategy

The Antarctic Marketing Strategy has been finalised. The Antarctic Tourism Group, comprising members from the Australian Antarctic Division, Tourism Tasmania, Hobart City Council, Hobart Ports Corporation, Parks and Wildlife Service, University of Tasmania and Antarctic Adventure, is now developing specific initiatives and tasks for implementation.

Antarctic and Southern Ocean Policy Document

The Office of Antarctic Affairs is continuing to implement the specific recommendations of the policy document. To date eight of the recommendations have been fully implemented and work continues on others. I once again urge TPN members, and those people interested in Antarctic issues, to take the time to read this document as there may be synergies between your endeavour and what the State considers a priority in this area. The policy is available on line at the OAA web site: www.oaa.tas.gov.au

Proposed Antarctic Airlink

SkyTraders has been announced as the successful tenderer for Australia's Antarctic Air Link, with Hobart as the preferred departure point. OAA staff has met with the principals of SkyTraders and provided them with a small gift as a welcome to the Tasmanian Antarctic community. The meeting provided an opportunity to reinforce the commitment and support that the local Antarctic community will provide to the preferred contractor. It is hoped that representatives from SkyTraders will be able to brief the TPN at our meeting or alternatively hold a separate function to discuss the implication to industry of this important announcement.

Mid Winter Events

Mr Paul Cullen has been appointed Event Coordinator for the *Antarctic Winter Festival – Tasmania 2002* (working title). Paul brings a wealth of Antarctic experience and event management to the position. Most recently he has been Station Leader at Casey for the last 18 months. Prior to that he was Executive Chef to the Hotel Grand Chancellor. The event is scheduled for 15-23 June, with a range of activities planned. Paul will brief the TPN on developments of this significant festival at the upcoming TPN meeting.

Tasmanian Polar Network

OAA has been developing a preliminary strategy for the upcoming trade show at the SCAR/SCALOP meeting in Shanghai China in July 2002.

Work is continuing on the translation of aspects of the TPN site into a number of foreign languages. The Japanese translation has been completed. The Russian, Spanish and French conversions are being completed by translators at CCAMLR.

OAA is also continuing its policy of meeting each of the TPN members in their business place to gain a better understanding of the needs of our members.

A big thank you to all those TPN members who have responded so quickly to the expenditure survey. The information being gained further reinforces the importance of the Antarctic sector to the State.

Antarctic Cruising

Over the Christmas period staff from OAA met with the principal operators of Quark Expeditions, Heritage Expeditions and Ocean Frontiers to introduce our office and to offer any assistance that the companies may require. One of the most interesting things that eventuated from the conversations was that the companies would prefer their clients to spend more time in Hobart but had not in the past been offered suitable product to achieve this. OAA has undertaken to provide portfolio of information on attractions and events in and around Hobart and Tourism Tasmania has agreed to provide assistance in bringing principal staff within these companies on a familiarisation visit to Hobart, if appropriate.



OFFICE OF ANTARCTIC AFFAIRS

AUSTRALIA-ANTARCTICA AIR LINK

During my 14 months as Director of the Office of Antarctic Affairs, one issue, above all others, has generated the greatest amount of interest and, indeed, a sense of ownership within the local Antarctic community. That issue is the provision of an Australia-Antarctic Air Link.

I use the words interest and ownership advisedly. Tasmanians feel very strongly about protecting the State's unique relationship with the frozen south in both a historical and a contemporary context.

When, at different stages during the selection process, other areas within Australia attempted to stake a claim for the air link, there was a united rebuttal of any proposal to locate the air link anywhere but Hobart.

The Office of Antarctic Affairs promoted Hobart as the preferred point of departure. It presented detailed information to all the shortlisted contractors, highlighting the benefits that our State offered. As well as strong industry support through the Tasmanian Polar Network the State also enjoyed strong bi-partisan political support. Regular briefings were undertaken to keep our politicians informed of developments from the State's perspective.

Whilst I acknowledge that there is still a lot of work to be done before planes are flying out of Hobart bound for Antarctica, all people that have a personal and professional interest, will share with me in commending the Australian Antarctic Division on taking this very significant first step.

The Tasmanian Antarctic community has an international reputation as a "can-do" group that is extremely flexible and adaptable to meet any situation presented. The provision of an exceptional standard of infrastructure and operational support to the preferred contractor SkyTraders and the Antarctic Division will continue to be a primary objective of the local Antarctic community.

I know that we can deliver.

Bill Bleathman
DIRECTOR

INTRODUCING SKYTRADERS

According to Bill Bleathman, Norman McKay, Manager of SkyTraders, is keen to meet members of the Tasmanian Polar Network and discover the range of Antarctic goods and services available in Tasmania.

The NSW company chosen to be the operator of the new Australian-Antarctic air link was established 20 years ago and is now one of Australia's leading air charter brokers and cargo airline representatives. Their range of cargo has included live sheep, alpacas and other animals, fresh and chilled produce, as well as computer systems and outsized machinery.

The aircraft chosen by SkyTraders to fly between Hobart and Casey Station, and return without the need to refuel in Antarctica, is the Dassault Falcon, a 16-seater jet able to reach Casey within 5 hours. Having reached Casey, scientists can then be flown by CASA 212 aircraft, with a possible range of 3000 kms, to other Australian bases. With 25 flights planned for the 2003-2004 summer season, clearly this will provide more time for more scientists to carry out their research, with fewer delays in travel time.

ANTARCTIC ADVENTURE



NEW GENERAL MANAGER'S EXCITING PLANS FOR ANTARCTIC ADVENTURE

Antarctic Adventure's new General Manager is committed to raising the multi-million dollar facility's profile and positioning it as one of Tasmania's top attractions.

Under Rodney Cameron-Tucker's leadership, the Salamanca Square facility has already recorded its highest-ever number of weekly visitors for three years and a comprehensive upgrade program is underway. Additional plans to further improve the facility and boost visitor numbers are also in the pipeline.

Previously the Business Manager of the world-class Antarctic scientific research and educational organisation, the Antarctic Co-operative Research Centre, Mr Cameron-Tucker said Antarctic Adventure offered unique opportunities in a range of sectors, including tourism, education, conventions and corporate functions.

"Our location is ideal — close to Hobart's CBD and waterfront and right in Hobart's historic Salamanca Place. On top of this, the facility offers unique, exciting, fun and educational activities — yet our visitor numbers have not reflected this," Mr Cameron-Tucker said.

"Through the development of strategic partnerships throughout Tasmania, Australia, and indeed overseas, as well as the development of comprehensive plans for the development and marketing of the Centre, I am confident that Antarctic Adventure can become one of Tasmania's most visited attractions.

"Work has just begun on tapping into the lucrative cruise ship and conventions markets and already efforts have paid off — numerous passengers from the *Legend of the Seas* which recently visited Hobart also visited our Centre, and 16 conventions have been booked for this year.

"Once additional plans are in place, the Centre can only continue to build upon its world class reputation to become one of the 'must see' attractions when visiting Hobart."

Activities already completed or planned for the next few months include a refurbishment program involving upgrading The Blizzard so that additional rides are available daily, more hands-on displays, an energy management system upgrade to reduce early morning noise, and radio and television promotions soon to be extended to print media.

Mr Cameron-Tucker said he was looking forward to implementing additional programs throughout the year that would make Tasmanians more aware of the unique Centre that was right on their doorstep.

OTHER NEWS

- A Christmas promotion by Antarctic Adventure has been won by Nicole and Cameron Brown, whose prize included a flight over Antarctica in February, followed by a week on holiday in Queensland. The new Manager of Antarctica also treated the couple to a tour of the Centre, and they toasted their success in the cool room.

- Also new to Antarctic Adventure is Carmel Clark, who has been appointed as personal and marketing assistant to Rod Cameron-Tucker. Ms Clark was the former operations manager of the YMCA in Hobart and manager of the Derwent Valley Sport and Recreation Centre before that.



WHALE WATCHES

- Greenpeace activists protesting against the Japanese whaling fleet in the Southern Ocean were unable to prevent the harpooning of more minke whales in December last year. *Arctic Sunrise* tracked the whalers on *Kyo Maru* and *Nisshin Maru* for over a week and was able to film the whalers' activities.

According to Greenpeace crewmember Yuko Hirono, the whale meat would bring a wholesale return of at least \$A55 million.

- In January this year, the same whaling fleet was ordered out of Australian Antarctic Territory by *Aurora Australis*. Japan does not acknowledge territorial waters and was observed 38 nautical miles inside the economic exclusion zone near Prydz Bay. No whaling activities were being carried out at the time.

- According to other news reports in January, tonnes of whale meat, supposedly caught for scientific purposes in 2000, have gone unsold because of Japan's economic slump. This was reported by the Institute of Cetacean Research (ICR), an organisation responsible for the 'scientific research' killing and sale of whale meat.

- The ICR are also planning to establish a whale farm in a large bay at Hirado in southern Japan. By netting off the entire bay and trapping wild whales to transfer to the farm, the institute expects to carry out research on whales' feeding behaviour and reproductive physiology. Environmentalists dismiss the idea as unworkable for migrating mammals and regard the farm as a potential large-scale commercial venture.

- Two Japanese research ships involved in monitoring, not killing whales, called into Hobart in December before a 61-day voyage for the International Whaling Commission-Southern Ocean Whale and Ecosystem Research group. Aboard the *Shonan Maru* and *Shonan Maru No.2*, provided by Japan to the IWC, is a team of 8 scientists from USA, Japan, Chile and New Zealand who will estimate minke whale populations and take blue whale skin samples for genetic analysis.

However, on their return to Hobart in February, the scientists reported that a large proportion of their research was deferred until next year because of adverse weather conditions in the Southern Ocean.

- A pilot program using videoconferencing to link up an international study on whales and other marine mammals has been launched by students from Melbourne's Glen Waverley Secondary College. Using video links from Inmarsat marine satellites, the students will be able to interact with the crew of MV Odessey, a whale research vessel which recently began an extended voyage to study and film marine mammals. Further details are available at www.oceanalliance.org

SPECIAL VISITORS

Princess Anne, Patron of the British Antarctic Heritage Trust, made her first visit to Antarctica in February. The visit was arranged to mark the centenary of Robert Falcon Scott's arrival there, and plans, to raise \$29 million to maintain historic sites on the Ross Seas shelf, will be announced by Princess Anne at the unveiling of a memorial to Scott at Discovery Hut. Although the first flight to Antarctica returned to N.Z. because of adverse weather conditions, the Princess was flown to McMurdo Sound and taken by helicopter to Cape Evans. Her return to Scott Base was again delayed by blizzard conditions.

Accompanied by senior politicians and business leaders, the Malaysian Prime Minister also visited Antarctica in early February. Mahathir Mohamad took a week-long cruise in Antarctic waters.

ICEBERG RISK TO YACHTS

One of the yachts in the Volvo ocean race hit an iceberg while en route to Cape Horn last month. The Australian Team News Corp collided with the iceberg while sailing at 21 knots, and repairs had to be made to the mast and sails as the yacht continued the race. At 60 degrees South, wind speeds were up to 45 knots and crew were on 24-hour watch for icebergs and growlers (low icebergs not picked up by radar).

OTHER PIRATES CAUGHT

HMAS *Canberra* and *Westralia* intercepted another 2 boats suspected of fishing illegally for the Patagonian Toothfish in the Southern Ocean. As occurred with the *South Tomi* last year, the ships were accompanied back to Fremantle, where the catch will be confiscated and the Captains likely to be fined.

IGLOO SATELLITE CABINS : THE FIRST FIVE YEARS

2002 marks the twentieth year since the first fibreglass Igloo Satellite Cabin was designed and manufactured in Kettering, Tasmania, by Malcolm Wallhead. Although Malcolm died as a result of an accident in October 2000, Igloos continue to be manufactured according to his specifications and exported all over the world. The next four issues of *ICE BREAKER* will include an article which traces the development of the Igloo over periods of 5 years each, describing the variations of Igloos requested by purchasers and the additions and accessories invented to satisfy customers' needs.

IGLOOS NO. 001 TO NO. 034, 1982-1986

'How did you get the idea for a fibreglass Igloo?'

This question was asked so often that it became tiring to repeat the story! In the 1970s, Malcolm designed an igloo-shaped hut ideal for setting up in remote places to escape the pressures of city life. With no finance to make a prototype at that time, the design was stored away until 1982, when a call was received from the Antarctic Division's Field Equipment Officer, Rod Ledingham, requesting a third quote for modifications to a fibreglass caravan-shaped unit so that it could be flown suspended under a helicopter to summer research sites in Antarctica. Malcolm persuaded Rod that a caravan shape was not as aerodynamic as a dome shape, and offered to make one of his igloos instead. How long did he have to make it? Only four weeks, then the *Nella Dan* departed for Antarctica.

Having so little time to make an entire cabin, complete with floor, was too good a challenge to ignore, so work to make the original or plug for an eighth of a dome (a single wall panel) was begun straight away. Once the entire plug was completed, a fibreglass mould was made so that eight casts could be produced. Three were plain panels, 4 were window panels, plus one door panel. Plugs, moulds and casts were also made for doors, top air vent units and all other fibreglass parts required to complete the prototype. The last panel to be completed was the door panel, which was carried on to the ship at the last minute by Rod and remained in his cabin until being off-loaded in Antarctica. As there was no time to insulate this first cabin, it is now mostly used as a storage hut, but the first expeditioners to use the cabin over summer were favourably impressed by the windows and the lack of noisy tent flaps.



Igloo Satellite Cabin No.001, as seen above, was first used for penguin research on Magnetic Island near Davis Base. It consisted of a door panel, 3 plain panels, 4 window panels, a round top-knot/escape hatch and two floor panels. It is still in use in Antarctica today, nearly 20 years since construction. [Photo courtesy AAD]

TOP PHOTO: Malcolm holding the last panel made for the first Igloo Satellite Cabin 1982.

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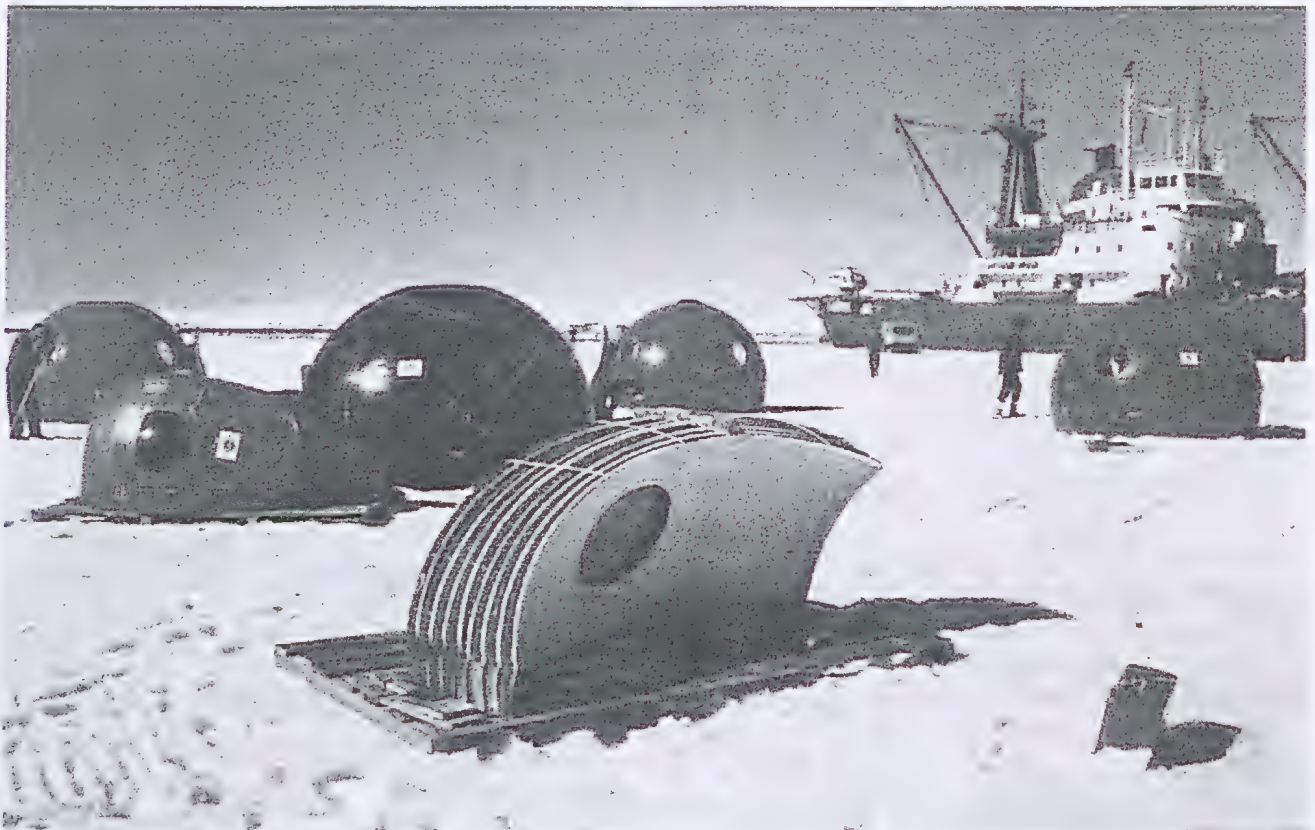


PHOTO: Offloading Igloos from *Nella Dan* for Edgeworth-David Base, Bunger Hills, Antarctica, 1986. [Photo courtesy AAD]



PHOTO: 'IGLOOBYEN', Nordestland, Svalbard, 1986. [Photo courtesy SPRI]

What next?

The second Igloo (002) was also ordered by AAD in May 1983, after modifications were discussed with Rod Ledingham. Double-glazed polycarbonate windows were used instead of single panes, the floor was made by 4 adjoining panels and the door redesigned to fit flush with the door panel.

Igloos 003 and 004 were also purchased by the AAD in late 1983, and the first set of extension panels were made, which necessitated two half topknots with air vents and a separate escape hatch in one of the extension panels. The first four Igloos were coloured red for best visibility on snow.

Igloo 005 was not used for Antarctic purposes, but was an experimental unit made with natural resin as a greenhouse in February 1984. Igloo 006, which was provided without a floor, was the first used in Tasmania, in the southwest, by the National Parks and Wildlife Service.

The next 2 Igloos (007, 008) were purchased by AAD in 1984, and in 1985, the AAD ordered 10 in one season (009-018), 6 of which were used to establish Edgeworth David Base at Bunger Hills in January 1986. All were red Igloos, some basic and some extended, except for a black Igloo specially prepared for use as a darkroom. Unfortunately, this Igloo was accidentally dropped 396 metres on to a glacier while the helicopter was flying it from the *Nella Dan* to Bunger Hills. Even more unfortunate was the fact that this Igloo contained all the cooking equipment, which had to be reshaped and recycled from the glacier before any meals could be cooked!

It was not until April 1986 that the first exported Igloo (019) was made. Purchased by Dr David Drewry, then Director of the Scott Polar Research Institute in Cambridge, England, this Igloo was also the first ordered with 3 sets of extension panels, and its destination was Svalbard, a Norwegian-governed archipelago north of Norway in the Arctic Circle. Confirmation of the order was received by phone at 4.30 one morning - one of the 'benefits' of a product being available worldwide! How to export a large, lightweight product by air from an island in the far south to an extremely remote island in the far north required a sharp learning curve for all parties involved and the consignment was in transit for 15 days. The crated Igloo first left Kettering on Mason's truck for delivery to the airport, and then the consignment was flown by Ansett, Lufthansa and Scandinavian Air Services to Tromsø in northern Norway. The crate had to be unpacked at this stage and all panels stacked inside a Twin Otter which flew to Longyearbyen on Svalbard, then to Nordestland at 79°45.98'N, 25°28.42'E. The camp was named 'Igloobyen'.

In September 1986, more Igloos were made for the AAD, originally for use on Heard Island. Igloos 020-022 were red and Igloos 023-025 were the first orange Igloos. Orange Igloos sited on rocky surfaces proved more visible from a further distance than red ones. Black is the most distinctive colour in snow, so all air vent covers on Igloo doors and top escape hatches are black for best visibility in white-out.

More Igloo orders were received in October 1986, making it the busiest year ever recorded.

Igloo 026 was another export order, this time from the National Marine Mammals Laboratory in Seattle, Washington, USA. Airfreighted to Santiago, Chile and shipped to Elephant Island, most of this Igloo was destroyed in a landslide in 1990, although undamaged panels were later reassembled and attached to the end of another field hut. Shortly after this order, ITT Antarctic Services, the company then in charge of the USA's National Science Foundation's Polar Operations, ordered their first Igloo (027) which was airfreighted to Christchurch for transshipment to McMurdo Base in Antarctica.

The end of 1986 saw the completion of 7 more Igloos for the Australian Antarctic Division (028-034), making a total 31 for Australian purchasers, and 3 exports.

News of Igloos spread throughout the Antarctic community, mostly by word-of-mouth from expeditioners, and the next five years saw Igloos being exported to polar institutes all over the world. A few ended up in quite unexpected places! [continued next issue]

ANTARCTIC DIVISION'S UPGRADE

Work has begun on a \$6.2 million project to upgrade and re-develop areas of the Australian Antarctic Division's site at Kingston, Tasmania. The sale of the land to a private consortium financed by ABN AMRO came into effect in December 2001, and the facilities are now leased back to AAD. The re-development is the first since the AAD opened over twenty years ago, and work is expected to be completed in October this year.

The new facilities will include upgraded laboratories for biology, ecology and atmospheric science, a dedicated krill aquarium and herbarium, as well as a new building linking existing facilities for housing, planning and other research. Building contractors are Hansen & Yunken Pty Ltd of Hobart.



EXTRA NEWS

TPN TEAM TO SHANGHAI

Two members of the Tasmanian Polar Network have been chosen to attend the forthcoming COMNAP meeting in Shanghai, China. Geraldine Edwards, Marketing Manager of Moonraker Australia Pty Ltd and Richard Fader of Tasmanian Shipping Supplies, will be representing the TPN at the exhibition of polar goods held in conjunction with the COMNAP meeting. The Office of Antarctic Affairs will also be represented.

CCAMLR CHANGE

The new Executive Secretary of CCAMLR, Denzil Miller, arrived in Hobart in February this year. Previously involved in Antarctic matters in South Africa, Mr Miller succeeds Esteban de Salas from Spain.



SCHOLARSHIP WINNER TO ANTARCTICA

David Pointing, an engineer who was awarded a scholarship from the Office of Antarctic Affairs to study hydrogen power storage systems for use with renewable energy generators in Antarctica, departed for Mawson Station in January this year aboard the *Polar Bird*. Mr. Pointing will be working on constructing a protective tent for a 50-tonne crane that will be used when wind power facilities are assembled at the base. (See ICE BREAKER No. 16.)

ICE TRAP

Prior to the January sailing mentioned above, *Polar Bird* had been trapped in ice in Prydz Bay, about 500 kms from Mawson Station. The 34 expeditioners due to spend summer at Mawson were confined to the ship over Christmas, then flown by helicopter to *Aurora Australis* before being taken to Mawson. After several delays due to heavy ice and blizzard conditions, *Aurora Australis* forced a passage through the ice to reach *Polar Bird*, whose crew had stayed aboard awaiting rescue. Finally, on January 13, after 36 days, the ship was free to return to Hobart.

A SHIP MORE TAXED

Don and Margie McIntyre's ship, the *Sir Hubert Wilkins*, received media attention when the French government expected the owners to pay \$3500 in tax if the ship moored near Dumont D'Urville on French Antarctic Territory as planned.

Fortunately, the demand was withdrawn in this instance, after a meeting held at the French base between Don and the station leader. As well, representatives of France's polar institute and the Antarctic tourist industry drew the government's attention to the Antarctic Treaty, which forbids any country from declaring sovereignty rights in Antarctica.

The taxes, which were established in July last year, apply to private vessels only, not research ships, and the McIntyres' ship was the first to be asked to pay. The French polar institute's representative in Hobart, Antoine Guichard, confirmed that there had been no consultation regarding the taxes between the French government and the institute.

The visit to the area of coast near the French base was part of the ship's complete voyage, which also included time for dismantling and removing the McIntyres' 'Gadget Hut' at Commonwealth Bay and searching for the three anchors from Mawson's ship *Aurora*.

PENGUIN PROBLEMS

The mystery disease spreading through an Adelie penguin colony near Mawson base has not yet been identified. Over 100 dead penguins were retrieved near the base in December last year and tissue samples will be analysed at the Australian Antarctic Division in Kingston in an attempt to identify the disease.

Adelie penguins at Cape Crozier on Ross Island have had their access to breeding grounds cut off because of a huge ice sheet, which means the adult penguins need four days to reach their chicks, instead of a few hours. Scientists monitoring the colonies fear that some will disappear completely if access to food does not improve soon. A colony of Emperor penguins has already been destroyed.

NEW SITE FOR RARE SEABIRD

Until recently, the closest breeding site to Australia for the soft-plumaged petrel was the Sub-Antarctic islands off New Zealand. However, this rare seabird has now been found breeding at Maatsuyker Island, south of Tasmania. The birds, which nest in burrows, do not have to defend their nests against predators such as cats or rats, and wildlife researchers should have the opportunity to check on chick numbers in April.

MORE SEAL RESEARCH

Despite earlier controversy regarding the necessity of seal research which left elephant seals permanently scarred from branding irons, the Tasmanian Environment Minister has approved an application for the University's Department of Zoology to continue research this year.

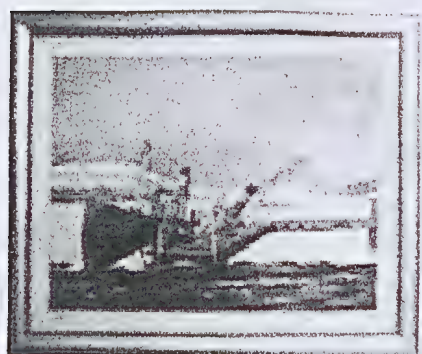
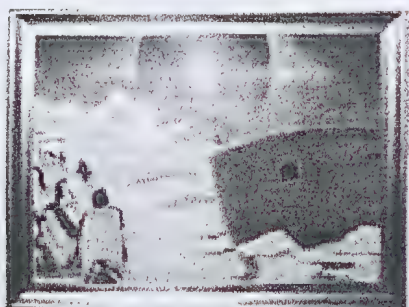
Macquarie Island researchers intend to continue with a five-year plan to establish whether female seals' feeding sites and the availability of fish, krill and squid in those marine environments are related to the decline in seal numbers.

NEW MARITIME ART PRIZE

Artists from all over the world submitted paintings for the inaugural Tasmanian Southern Ocean Art Prize Exhibition, which was held in the Carnegie Gallery, upstairs from Hobart's Maritime Museum. More than 60 entries were received from Alaska, New York, Hong Kong, interstate and around Tasmania, and the winner of the \$10,000 first prize was Ib Odfeldt from Cygnet, Tasmania, for his oil painting of *Nella Dan*. The \$1000 runner-up was Brian Wood of Cleveland, Queensland for his painting of Captain Cook.

The Maritime Museum intends this art prize to be bi-annual, and alternate with a model-making prize to coincide with the Australian Wooden Boat Festival.

Below: A selection of artwork from the exhibition (not to scale).



POLAR NEWS



POLAR BRIEFS

- Tim Jarvis and Peter Treseder have begun their unsupported walk to the North Pole last month. If successful, they will be the first Australians to achieve this goal.
- Brazilian sailor Amir Klink has set sail in *Paratil 2*, headed for Antarctica on the first leg of a 3-year round-the-world voyage.
- Even movies such as *Shackleton's Antarctic Adventure* were not profitable enough to prevent the closure Adelaide's Imax cinema.
- Hobart's Taste of Tasmania stalls included one selling South Pole Icy Poles made from natural berries.
- Southern Sea Adventures, in conjunction with Aurora Expeditions, runs sea-kayaking trips in the High Arctic, from Svalbard and Greenland. See www.southernseaventures.com or www.auroraexpeditions.com.au for more details.
- Students and staff involved in Operation New Start departed in January for the second annual Victorian Schools Greenland expedition.

The program is designed to provide encouragement to teenagers considering dropping out of school, by teaching them seafaring, navigation and sporting skills.

- Unusually hot weather at Cape Denison in Antarctica has melted snow around Mawson's Hut and revealed a large number of artifacts from early expeditions. Despite numerous visits by concerned groups to record and plot positions of these objects, any attempt to conserve them must wait until a decision is made whether to preserve them in situ, or return them to Australia.
- An ice-melting robot called a Cryobot has successfully melted a hole 23 metres deep into a glacier on Svalbard, north of Norway. Researchers from NASA, the Norwegian Polar Institute and Norwegian Space Centre waited four days for the cylindrical Cryobot, using its copper tip heated up to 195 degrees, to bore into the glacier. Cryobots have been developed for potential use on Mars and Europa to penetrate thick layers of ice on their surface, but searching for microbial life in places like Lake Vostok in Antarctica is also a possibility.

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NEW PARTNERSHIP FOR DEVELOPING HOBART AS AN ANTARCTIC GATEWAY

The Government of Tasmania and the Hobart City Council have signed an agreement to work in partnership to develop Hobart as an Antarctic gateway.

The agreement was signed in December 2001 and is based on the recognition that:

- The City of Hobart is a strategic location of international, national and state significance for Antarctic, Sub-Antarctic and Southern Ocean activity.
- There is a substantial international and national community located within the City providing scientific, research, management and logistical support to Antarctic activity.
- The Tasmanian Government is seeking to develop Tasmania's role in the Antarctic, Sub-Antarctic and Southern Ocean industry, and
- The Hobart City Council is looking to support the state in promoting and developing Hobart as the major gateway to the Antarctic region.

The Agreement sets out the approach to be taken including the development of a Marketing and Promotion Strategy to:

- Position Hobart as a world centre for Antarctic science, research, management and logistics.
- Identify tourism product development and promotion opportunities.
- Attract Sub-Antarctic and Antarctic touring operations/visits.

The Government and the Council will also work together to promote and expand the capabilities of Hobart's Antarctic community. As a first step, a communication protocol will be prepared to include regular meetings between the Council and the Office of Antarctic Affairs for the ongoing management, implementation and review of the Strategy and the development of initiatives and opportunities.

The Hobart City Council will expand its website to provide linkages to, and promotion of, Tasmania's Antarctic connections and resources.

The strategy is due for completion by July 2002. Copies of the Partnership Agreement are available on the Hobart City Council website www.hobartcity.com.au.

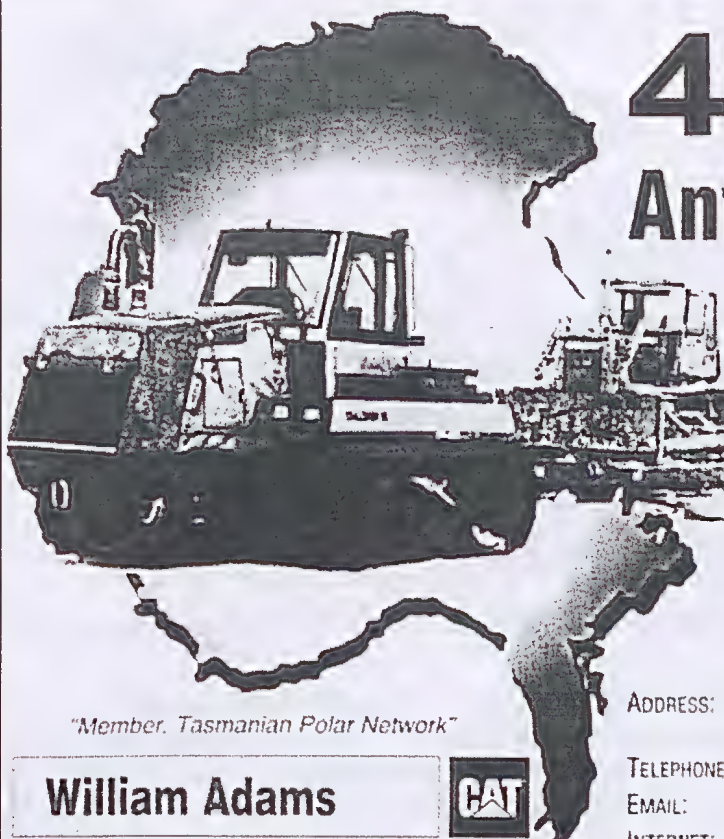
This agreement includes many of the suggestions from the various working groups formed at the most recent Governor's Forum on Tasmania, Antarctica and the Sub-Antarctic.

CONTAMINANTS IN FROZEN GROUND CONFERENCE

Topics included in this conference, to be held at the Australian Antarctic Division, 14-18 April 2002 include:

1. Fundamental Properties of Contaminated Soils
2. Processes of Contaminant Dispersal
3. Contaminated site Assessment
4. Legal, Policy and Compliance Issues
5. Environmental Impacts
6. Remote Sensing
7. Site Management, New Techniques and Remediation

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POLAR PUBLICATIONS



BOOKS:

'Antarctica: First Impressions 1773-1930' Edited by Douglas Sellick. Published by Fremantle Arts Centre Press. Price: \$29.95.

A collection of written records of the first sightings of Antarctica made by mariners, sealers, aviators and expeditioners since the 18th century.

'Macquarie Island'. New booklet published by the Tasmanian Parks & Wildlife Service. For further details contact Peter.Grant@dpiwe.tas.gov.au

BOOK REVIEW:

'Ninety Degrees North – The Quest for the North Pole' by Fergus Fleming. Published by Granta. Price: \$59.95.

In the mid-nineteenth century, the challenge to discover the exact nature of the North Pole was taken up by explorers and adventurers from several nations, including America, Germany, Austria-Hungary* and Britain. Fergus Fleming has researched extensive early references to all these expeditions and vividly describes the preparations and difficulties for each, as well as the character of the men involved, the harsh conditions they faced and the reasons for the expeditions' failure to reach the North Pole or discover a north-west passage for shipping. The author also covers Peary's claim to have reached the Pole first in 1909, and continues with accounts of later expeditioners such as Roald Amundsen, who crossed the Pole in 1926 in an airship, and the Russian team who were the first to set foot on the Pole in 1948.

The book also includes a chronology of major expeditions from 1845 to 1969, black and white photos of expeditioners and an Appendix with the 1877 description of scurvy, a constant problem for early explorers.

[* Footnote: In 1994, Austrian Television (ORF) acknowledged the 120th Anniversary of the 1872-74 Austria-Hungarian Expedition by making a 3-part documentary in Franz Joseph Land. A replica of the *Admiral Tegetthoff*, the expedition's ship which became icebound only a few weeks after leaving Germany, was taken to the island and filming of the documentary took place over 2 summers. One item of equipment used by the film crew was an insulated, canopy-covered sledge made by Malcolm Wallhead and Associates in Tasmania. The PolyPod SnowCamper sledge, towed by skidoo, enabled the film crew to track some of the actors' movements and also provide a warm place for making adjustments to cameras and film. MW&A were fortunate to receive videos of the documentary as well as a video of making of the film, including footage of the sledge in use.]

(Ninety Degrees North kindly supplied to ICE BREAKER by Allen & Unwin).

NEW ON THE WEB

The Office of Antarctic Affairs has recently begun a Newsletter to keep everyone up-to-date with Antarctic activities in Tasmania. Produced by the OAA team of Bill Bleathman, Ben Galbraith and Cordula Ruckstuhl. Check out the first edition on www.oaa.tas.gov.au

The Australian Antarctic Division has launched 'Classroom Antarctica', which has been designed to provide both teachers and students with access to a wide range of Antarctic policies, programs and activities. Available at: www.classroomantarctica.aad@aad.gov.au

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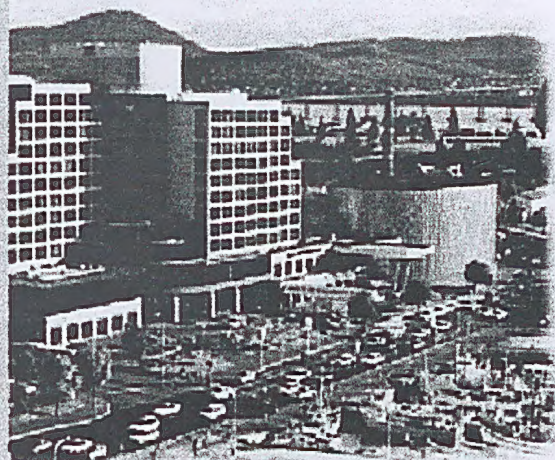
POLAR CALENDAR



2	March	2002	Fifth Antarctic Marathon. King George Island, Antarctic Peninsula. Contact: marathon@shore.net
8	March	2002	Last day of Tasmanian Southern Ocean Art Prize Exhibition. Carnegie Gallery, Tasmanian Maritime Museum. Hobart, Tas.
10-16	March	2002	International Sea Week.
15	March	2002	Tasmanian Polar Network Meeting. 11.00am-4.00pm. Venue T.B.A. Hobart, Tas.
18-23	March	2002	Joint Scientific Committee on World Climate Research meeting. Contact: John.Church@csiro.tas
21	March	2002	Antarctica & High Arctic slide show. Contact Aurora Expeditions on 1800 637 688. Hobart, Tas.
2-5	April	2002	Global Windpower Conference & Exhibition. Paris, France. Contact: Bruce Douglas, European Wind Energy Association, Ph: +32 2 546 19401, Fax: +32 2 546 1944, E-mail: ewea@ewea.org
14-18	April	2002	Contaminants in Frozen Ground Conference. Australian Antarctic Division. Kingston, Tas. Details: www.antcrc.utas.edu.au/antcrc (Seminars & Conferences).
21	April	2002	Phillip Law's 90 th Birthday.
27	April	2002-	54 th International Whaling Commission Meetings. Shimonoseki,
9	May	2002	Japan.
?	April	2002	End of Antarctic photo exhibition, Parliament House, Canberra, ACT.
?	May	2002	Biospheres Reserves Meeting. Hobart, Tas.
5	June	2002	World Environment Day.
15-23	June	2002	Antarctica Tasmania Mid Winter Celebration. Contact: cruckstuhl@oaa.tas.gov.au
1-5	July	2002	IAATO Annual Meeting. Cambridge, UK. Contact: iaato@iaato.org
1-12	July	2002	Antarctic Environmental Management Course. Hobart, Tasmania. Contact: Carolyn.Napier@utas.edu.au
15-19	July	2002	COMNAP XIV. Shanghai, China. Contact: jsayers@comnap.aq
15-26	July	2002	SCAR XXVII. Shanghai, China.
17-25	August	2002	National Science Week.
3-14	September	2002	XXV Antarctic Treaty Consultative Meeting. Warsaw, Poland.

www.antarctic-link.org.nz	Information about Robert Falcon Scott's Centenary exhibition at Canterbury Museum, Christchurch, NZ.
www.iceisland.net/journal.html	Expedition to photograph B15A iceberg.
www.panoramatour@lipetsk.ru	'Millennium 2000' Russian Antarctic expedition photographs (in Russian)

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ANTARCTIC AND SOUTHERN OCEAN SHIPPING CALENDAR

3	March	2002	POLAR BIRD V6	Arrives Hobart. Off-hire.
7	March	2000	TANGAROA	Arrives Hobart from Antarctica (JARE)
9-11	March	2002	AURORA AUSTRALIS V7/8	Arrives Hobart, departs for Macquarie Is
10	March	2002	SIR HUBERT WILKINS	Arrives Hobart.
11	March	2002	TANGAROA	Departs Hobart for NZ.
12	March	2002	L'ASTROLABE	Arrives Hobart from Antarctica.
14-16	March	2002	AURORA AUSTRALIS V8	Macquarie Island.
20	March	2002	SIR HUBERT WILKINS	Departs Hobart.
23	March	2002	AURORA AUSTRALIS V8	Arrives Hobart. Off-hire.

29	September	2002	KAP. KHLEBNIKOV V1.1	Departs Cape Town, South Africa.
6	October	2002	KAP. KHLEBNIKOV V1.1	Mawson Base.
13	October	2002	AURORA AUSTRALIS V1	Departs Hobart for Marine Science.
13-16	October	2002	KAP. KHLEBNIKOV V1.1	Davis Base.
22-25	October	2002	KAP. KHLEBNIKOV V1.1	Casey Base.
25	October	2002	AURORA AUSTRALIS V1	Macquarie Island.
30	October	2002-		
13	November	2002	AURORA AUSTRALIS V1	Marine Science.
2	November	2002	KAP. KHLEBNIKOV V1.1	Arrives Hobart.
19	November	2002	AURORA AUSTRALIS V1	Arrives Hobart.

For up-to-date shipping information, check the Hobart Ports Corporation website and the Australian Antarctic Division's websites:

www.hpc.com.au/expected
www.aad.gov.au/goingsouth